

REMARKS

After a careful review of the Office Action, Applicant proposes to amend some of the pending claims for purposes of clarification of the subject invention and to add a number of additional claims. As described below, none of the pending claims are anticipated by Graham U.S. Patent 6,534,769.

The Graham patent discloses a structure substantially unlike the invention of the pending claims. With reference to Fig. 5 thereof, in Graham, the reflective members 156, 158 provide multiple reflections of a beam of radiant energy 200 emitted from a source 154 and incident upon a sensor 162. This is brought about by the fact that the source 154 is not symmetrically located relative to the reflectors 156, 158. Further, Graham, relative to Fig. 5 thereof, and associated figures and text, does not produce a reference signal as well as a signal indicative of the fluid being sensed. Graham merely produces an indicator of the fluid being sensed as an output from singular sensor 12.

Thus, for at least the above reasons, none of rejected claims 1-16, 24, 25 are anticipated by Graham.

The rejections of claims 6, 7 as anticipated by Graham are defective in that the noted portions of Graham Col. 4, lines 13-23 and lines 50-52 simply do not address the limitations of either claim 6 or claim 7. As noted by Graham in the lines of Col. 4 relied on by the Examiner:

"Filter/cycle 20 receives expiratory gases from patient 12 via outlet 48 of airway tube 14. Expiratory gases can be a mixture of patient's 12 expired gases (such as CO₂), recovered inspiratory gases and harmful materials (such as microprobes and other contaminants). Filter/recycle 20 removes undesirable components, such as harmful materials, from the expiratory gases, to respirator/gas supply 18 for reuse. It is contemplated that patient respiratory circuit 16 may further include additional components such as a compressor to regulate the pressure and flow rate of gas streams

within the patient respiratory circuit 16....Each diverted gas sample can include inspiratory and/or expiratory gases. At all other times, air is sampled for auto-zeroing functions." (Col. 4, lines 13-23, 51-52)

The text, as noted above, is absolutely silent relative to the limitations of claims 6 and 7. Anticipation rejections cannot be based on silence. Anticipation requires that each limitation of a claim be set forth exactly as claimed in the alleged anticipating document. Graham clearly fails to disclose the limitations of either claim 6 or claim 7. Hence, for at least the above reasons, neither claim 6 nor claim 7 are anticipated by Graham.

Claim 12, rewritten in independent form, is also not anticipated by Graham. Graham, Fig. 5, merely discloses a single sensing element 162. A single sensing element, such as element 162 cannot be "symmetrically located relative to the common plane (152)" as asserted by the Examiner on page 3 of the Office Action. Hence, for at least the above reasons, claim 12 is not anticipated by Graham.

Claims 15 and 16 have been rewritten in independent form. Neither of those claims are anticipated by Graham. As described above, the beam 200 of Graham is subject to multiple reflections between the source 154 and the detector 162. This structure is clearly different than and cannot anticipate the structure of either claim 15 or claim 16 for at least these reasons.

Neither claim 24 nor claim 25 are anticipated by Graham. The portions of Graham referred to by the Examiner, Fig. 5 and Col. 7 lines 3-6 and 50-64 simply do not support an anticipation rejection. Unlike the structures of claims 24 and 25, the beam 200 of Graham is subject to multiple reflections before it reaches the detector 162. Further, the Graham structure incorporates only a singular interference filter 160 which is unlike the claimed structure. Finally, Graham generates only a singular beam 200 which reaches detector 162 and not:

"a gas related radiant energy beam (200) and a reference beam (202)" (Office Action, page 3)


What the above text is describing is two portions of the same beam 200, 202. The portion 200 is present before the first reflection, the portion 202 is present after the second reflection and then its incident on to the detector 162. As a consequence, only one type of information can be obtained from the detector 162 in response to the incident beam 202. In this regard, as described by Graham:

"Detector 162 is configured to sense a filtered beam, outputted from interference filter 160, impinging thereon and to convert the impinging filtered beam to an electrical signal (i.e., the analog signal) proportional thereto to be sent to gas concentration generation unit 56 for signal processing." (Col. 7, lines 32-37 Graham)

The above text emphasizes the fact that detector 162 receives only a single beam carrying a single type of information.

For at least the above reasons, none of the pending claims are anticipated by Graham. Allowance of the application is respectfully requested.

Respectfully submitted,

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